CLAIMS

1. A printed circuit board comprising:-

   (i) a plurality of layers comprising electrically conducting and electrically insulating planes;

   (ii) at least one via;

   (iii) resistive material provided on at least part of one or more faces of the printed circuit board which are substantially perpendicular to the layers and wherein the resistive material is electrically connected to at least two of the electrically conducting planes.

2. A printed circuit board as claimed in claim 1 wherein the resistive material is arranged such that in use it substantially absorbs spurious modes travelling along the at least two electrically conducting planes.

3. A printed circuit board as claimed in claim 1 wherein the at least two electrically conducting layers are ground planes and said electrical connection is a direct connection between the resistive material and those ground planes.

4. A printed circuit board as claimed in claim 1 wherein the at least two electrically conducting layers are power planes and said electrical connection is a capacitive coupling between the resistive material and those power planes.

5. A printed circuit board as claimed in claim 1 wherein one of the at least two electrically conducting layers is a ground plane and the other is a power plane and wherein said electrical connection between the ground plane and the resistive material is direct, and between the power plane and the resistive material is a capacitive coupling.

6. A printed circuit board as claimed in claim 1 wherein said via is selected from a through-hole via, a blind via or a buried via.

7. A printed circuit board as claimed in claim 1 wherein said resistive material is covered with a metallic shield such that in use, radiation from the printed circuit board is reduced and the effect of radiation outside the printed circuit board on the printed circuit board is reduced.

8. A printed circuit board as claimed in claim 1 wherein said resistive material is arranged to substantially reduce reflection of spurious modes travelling within the at least two electrically conducting planes.

9. A printed circuit board as claimed in claim 1 wherein the resistance of the resistive material is arranged to substantially match the impedance of the at least two electrically conducting planes.

10. A printed circuit board as claimed in claim 1 wherein said electrical connection comprises a capacitive coupling between the resistive material and at least one of the electrically conducting planes and wherein said printed circuit board further comprises means for enhancing said capacitive coupling.

11. A printed circuit board as claimed in claim 10 wherein said means for enhancing said capacitive coupling comprises one or more electrically conducting flanges connected to the resistive material and extending towards the electrically conducting plane.

12. A printed circuit board as claimed in claim 10 wherein said means for enhancing said capacitive coupling comprises two electrically conducting flanges connected to the resistive material and extending towards the electrically conducting plane, one on either side of the electrically conducting plane, and both extending beyond the end of the electrically conducting plane nearest the resistive material.

13. A printed circuit board as claimed in claim 1 which is arranged to provide a line rate of at least 1 giga bit per second.

14. A method of manufacturing a printed circuit board comprising:-

(i) forming a plurality of layers supported on a substrate said layers comprising electrically conducting and electrically insulating planes;

(ii) forming at least one via through at least some of the layers;

(iii) applying resistive material to at least part of one or more faces of the printed circuit board which are substantially perpendicular to the layers; and

(iv) ensuring that the resistive material is electrically connected to at least two of the electrically conducting planes.